

Incidental Thrombus in Left Atrium Appendage Detected by Intracardiac Echocardiography

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A 76-years-old woman visited the emergency department with exertional dyspnea. The electrocardiography rhythm showed atrial fibrillation (AF). Because the patient's symptoms were severe, we performed direct current (DC) cardioversion after checking the transesophageal echocardiography (TEE, EPIQ 7 Ultrasound system for cardiology, Philips, Netherlands). There was no thrombus in left atrium (LA) or appendage (Fig. 1). After DC cardioversion, the rhythm was converted to sinus rhythm and the patient's symptoms were relieved. She started to take an anticoagulant, Apixaban (5 mg) and an antiarrhythmic drug, Dronedaron (400 mg) twice a day. However, at the next outpatient clinic visit, the AF had recurred. Therefore, she was transferred to the electrophysiology lab for radiofrequency catheter ablation. The cardiac computed tomography (CT, CT scanner Aquilion One Genesis, Cannon medical system, USA) which was checked just before the procedure showed that the cardiac anatomy was usual and that there was no definitive thrombus in the cardiac chambers (Fig. 2). For safety, we inserted the intracardiac echocardiography (ICE) into the right atrium. Incidentally, there was 1.5 cm×0.9 cm size, round shaped thrombus in

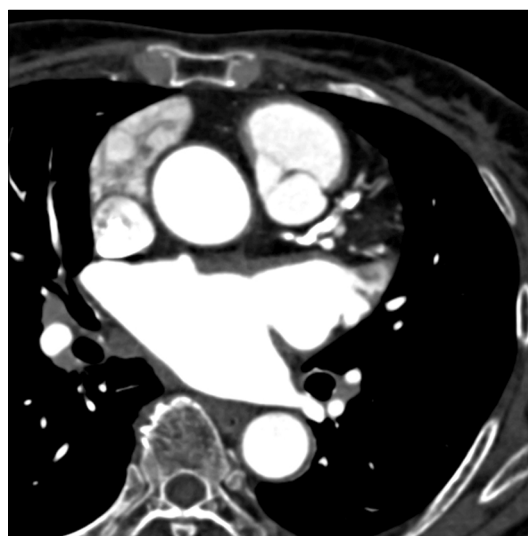


FIG. 2. The cardiac computed tomography images. There was no definitive filling defect in the left atrium and left atrium appendage.

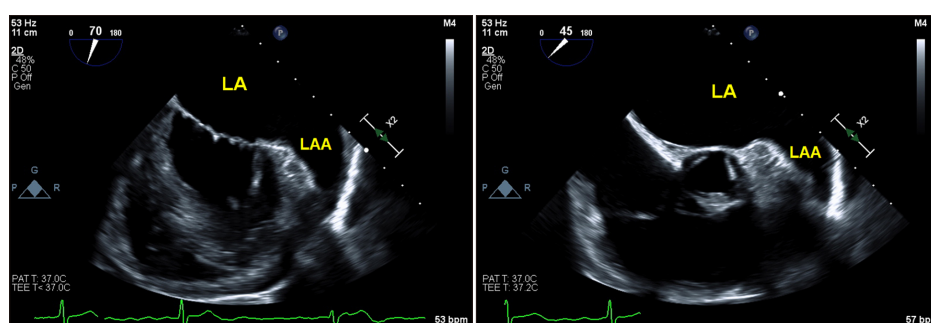


FIG. 1. Transesophageal echocardiographic images. There was no thrombus in left atrium appendage. LA: left atrium, LAA: left atrium appendage.

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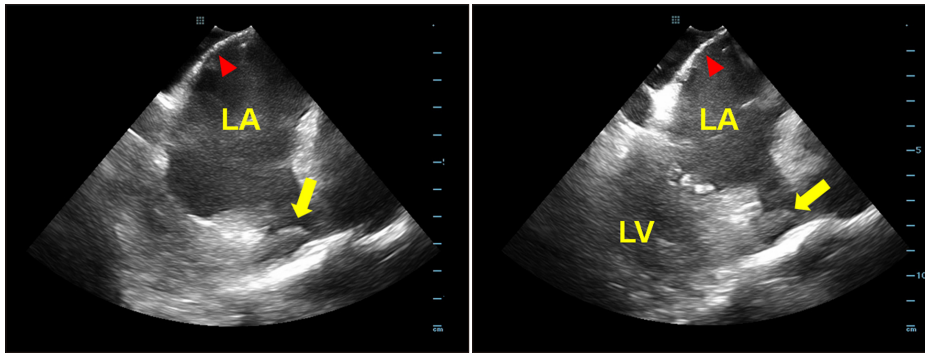


FIG. 3. The intracardiac echocardiographic images. The interatrial septum was clearly visualized (arrow head). There was round shape mass in left atrium appendage (arrow). LA: left atrium, LV: left ventricle.

LA appendage (Fig. 3). Therefore, we stopped the procedure and prescribed the Dabigatran 150mg twice a day replacing the Apixaban. Even though the patient had taken the anticoagulation appropriately and there was no evidence of thrombus on the TEE and CT, a thrombus can form in AF patients. Nowadays, the feasibility of ICEs is wide. Since ICE can visualize the inside of the heart, a physician who operates AF ablation procedures should consider to check if there was any thrombus, especially in the LA appendage. The recent study also advocates the role of ICE for detection of thrombus during AF procedures.¹

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CONFLICT OF INTEREST STATEMENT

None declared.

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